

# A METHOD AND APPARATUS FOR REDUCTION OF DISTORTION IN A TRANSMITTER

## **Abstract of the Disclosure**

5 A transmitter includes a feed forward amplifier that includes main signal path having a radio frequency (RF) power amplifier, a feed forward correction circuit, and a control circuit. An amplification of an input signal by the RF power amplifier produces an amplified signal that includes a distortion component. The feed forward correction circuit produces an error signal, which error signal is used to drive an error amplifier to produce an amplified error signal. In order to minimize a distortion component introduced to the amplified error signal by the error amplifier, the control circuit controls a peak power of the error signal based on a detected energy of an attenuated version of the error signal or based on the distortion component introduced to the amplified error signal by the error amplifier.

15

693-694 2000